

ABSTRACT

A long term stabilized magnesium hydroxide suspension which can be used for covering pellets of several materials in order to avoid the agglomeration of a plurality of pellets when stored or subjected to a heat treatment and which can be stored for at least three months without substantial agitation and without experiencing substantial settlement and solid hard substrate formation, comprising a solid content of about 51% to 61%; a water content of about 39% to 49%; a viscosity of about 500 to 1,500 cp.; an average particle size of about 1 to 2.5 microns; a $Mg(OH)_2$ content of about 50% to 60%; an equivalent magnesium oxide content of 34% to 42%; including an adherent compound at a concentration of at least 30% in an amount of 0.5 to 5%, by weight, on a dry basis and an anionic polyelectrolyte as a dispersant agent, and which is obtained by washing, filtering and repulping magnesium hydroxide solids to obtain agglomerated solid particles, dispersing the agglomerated solid particles by comminution in a dispersing equipment, to reduce the particle size providing a dispersed product, grinding the dispersed product, to additionally reduce the particle size to about 2 microns; and adding an adherent compound at a concentration of at least 30% in an amount of 0.5 to 5% on a dry basis and an anionic polyelectrolyte at a concentration of at least 25%, in an amount of about 0.5 to 2.5%, by weight, on a dry basis, as a dispersant agent .